REMARKS

Reconsideration of this application, as amended, is requested.

Claims 1-10 remain in the application. Claim 1 has been amended to correct a clerical mistake in line two. Claim 10 has been amended to define the invention more clearly.

Claim 10 was rejected under 35 USC 101 because the claim defined the invention as a "use" without defining any method steps involved in the "use". Claim 10 also was rejected under 35 USC 112, second paragraph for essentially the same reasons.

Claim 10 has been amended and it is believed to be in proper statutory form.

Claims 1-9 and 11-14 were rejected under 35 USC 103(a) as being obvious over U.S. Patent No. 6,383,540 to Noel considered in view of U.S. Patent No. 5,443,650 to Saska et al. The Examiner identified process steps of the references that were considered to be relevant to the claims.

Reconsideration is requested.

The invention defined by original claim 1 relates to a decalcification method of an aqueous solution comprising multivalent cations Ca^{2+} and Mg^{2+} and anions able to form complexes with at least a part of said multivalent cations. The method includes replacing at least a part of said anions able to form complexes of aqueous solution by monovalent anions such as Cl^-, non-able to form such complexes. Simultaneously, with this claimed replacement step or after this claimed replacement step, the method further includes replacing at least a part of said multivalent cations of

the aqueous solution by monovalent metal cations, such as Na^+ and/or K^+. The first replacing step recited in original claim 1 is performed by an anionic resin of which the counter ion is a monovalent anion non-able to form complexes with the multivalent cations. The second replacing step defined in original claim 1 is performed with a cationic resin in which the counter anion is a monovalent metal cation.

Noel discloses a method of treating whey for demineralization purposes. The Noel method comprises a step of separating out salts by transfer through electrodialysis or nanofiltration membranes where the method comprises, in succession, at least one step of exchanging divalent cations for protons and at least one step of exchanging divalent anions for chloride ions. When 60-65% of the calcium and magnesium cations have been exchanged for protons by percolation over a carboxylic resin, the remainder of these cations are exchanged for protons by the strong cationic resin. Finally the substance is passed over an anionic resin to exchange divalent anions to chloride anions.

The Saska et al. reference relates to process for softening an aqueous sugars containing sugars and Ca^{2+} and/or Mg^{2+} ions with using a cation exchange resin, in the form Na^+ and/or K^+ to give a softened sugar juice depleted on Ca^{2+} and/or Mg^{2+} and charged with Na^+ and/or K^+, and a further step for regeneration of said resin.

It is submitted with respect that the invention defined by original independent claim 1 and its dependent claims is not obvious over the hypothetical combination of Noel and Saska et al. The invention relates to aqueous solutions, for instance in the production of lactose from whey, where the presence of calcium interferes with the concentration of the whey. The problem addressed by the invention

has been to get rid of calcium and magnesium ions with a method where the formation of complexes with Ca^{2+} and/or Mg^{2+} ions is lowered when compared to previous methods using strong cationic resins. The prior art references relate to different areas. One reference relates to whey, the second reference relates to aqueous sugar juice. The common point references is the use of ion exchange resins. The treatments described in the references does not include or suggest the treatment of the invention that includes firstly the replacement of anions able to form complexes by monovalent anions such as Cl^-, non-able to form such complexes, and secondly the replacement of multivalent cations by monovalent metal cations, such as Na^+ and/or K^+. Neither reference suggests that a first treatment by monovalent anions such as Cl^- could be preformed. Accordingly, it is submitted that the invention defined by claims 1-9 and 11-14 is not suggested by the hypothetical combination of Noel in view Saska et al.

Claims 1-9 and 11-14 were rejected under 35 USC 103(a) as being obvious over U.S. Patent No. 4,159,350 to Jonsson considered in view of Saska et al.

Jonsson relates to a method of desalination of whey conducted through an anion exchanger and a cation exchanger. First a weakly basic anion exchanger in hydrogen carbonate form is used and then a weakly acidic cation exchanger in ammonium form is used.

Jonsson and Saska et al. relate to very different technological areas. The only common point between them is the use of ion exchange resins. It is submitted that the person skilled in this art and familiar with Jonsson and Saska et al. would not be led by those references to the method defined by claims 1-9 and 11-14 herein.

Accordingly, it is submitted that the invention defined by claims 1-9 and 11-14 is not suggested by the hypothetical combination of Jonsson and Saska et al.

Claim 10 was rejected under 35 USC 103(a) as being obvious over either of the combinations of references discussed above. For the reasons explained above, it is submitted that amendment claim 10 is not taught or suggested by either of these combinations of references.

In view of the preceding amendments and remarks, it is submitted that the claims remaining in the application are directed to patentable subject matter and allowance is solicited. The Examiner is urged to contact applicant's attorney at the number below to expedite the prosecution of this application.

Respectfully submitted,

Gerald E. Hespos, Esq.
Atty. Reg. No. 30,066
Customer No. 001218
CASELLA & HESPOS LLP
274 Madison Avenue - Suite 1703
New York, NY 10016
Tel. (212) 725-2450
Fax (212) 725-2452

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